



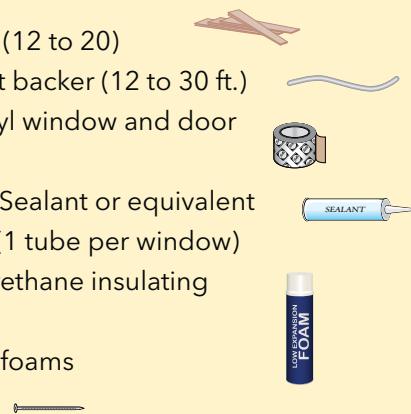
## WINDOW REPLACEMENT INSTRUCTIONS FOR CASEMENT, DOUBLE-HUNG AND CLAD FRAME WINDOWS USING FRAME SCREWS

These instructions were tested and developed for replacing windows in wood-frame wall construction systems designed to manage moisture. Installation recommendations for other types of wall construction, wall systems, conditions, multiple windows or bow bay windows, may be obtained from Pella Corporation or a local Pella retailer. Building designs, construction methods, building materials, and site conditions unique to your project may require an installation method different from these instructions and additional care on your part. Determining the appropriate installation method is the responsibility of you, your architect, or other construction professional.

**Note:** This instruction is not for use in applications that have vinyl, steel or aluminum siding where water may be behind the siding above the window. In these applications, the siding may need to be removed and window installed using the new construction installation instruction that is attached to the window.

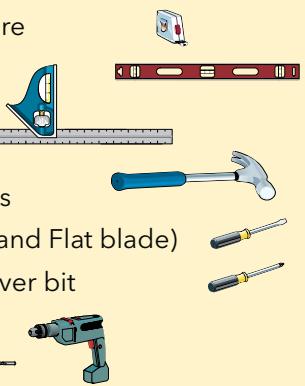
### YOU WILL NEED TO SUPPLY:

- Cedar or Impervious shims/spacers (12 to 20)
- Closed cell foam backer rod/sealant backer (12 to 30 ft.)
- Pella® SmartFlash™ foil backed butyl window and door flashing tape or equivalent
- Pella Window and Door Installation Sealant or equivalent high quality, multi-purpose sealant (1 tube per window)
- Low expansion, low pressure polyurethane insulating window and door foam sealant.
- DO NOT use high pressure or latex foams
- #8 x 3-1/8" Finish head screws



### TOOLS REQUIRED:

- Tape measure
- Level
- Square
- Hammer
- Screwdrivers (#2 Phillips and Flat blade)
- #10 Torx driver bit
- Drill
- 1/8" bit

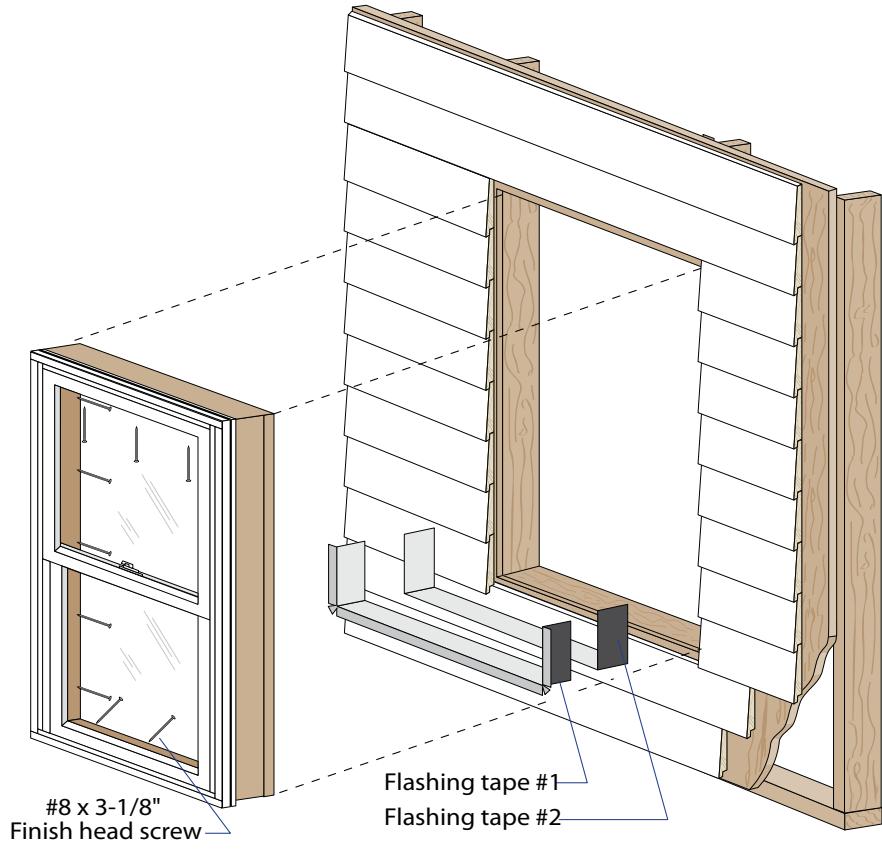


**Installation will require two or more people for safety reasons.**

**REMEMBER TO USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT.**



Always read the Pella® Limited Warranty before purchasing or installing Pella products. By installing this product, you are acknowledging that this Limited Warranty is part of the terms of the sale. Failure to comply with all Pella installation and maintenance instructions may void your Pella product warranty. See Limited Warranty for complete details at <http://warranty.pella.com>.



# 1

## Prepare the Opening:

**A. Prepare the rough opening.** It must be the correct size (window frame plus 3/4" in both width and height), square, plumb and the sill must be level. If needed, block in the rough opening on both sides, the top and the bottom.

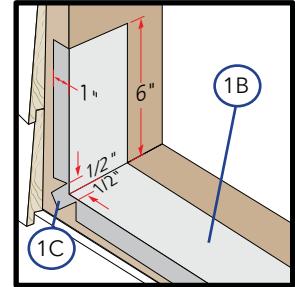
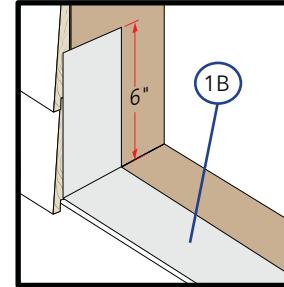
**Note:** If installing new blocking, install the blocking so it's flush with the exterior sheathing of the house. DO NOT attempt to install a window in an undersize opening.

**B. Apply sill flashing tape #1.** Cut a piece of flashing tape 12" longer than the opening width. Apply at the bottom of the opening as shown (1B). For openings where exterior trim was removed, apply the tape so it overhangs 1" onto the exterior sheathing or water resistive barrier.

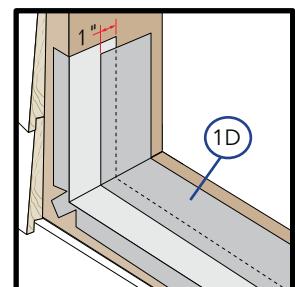
**Note:** The tape is cut 12" longer than the width so it will extend 6" up each side of the opening.

**C. Tab the sill flashing tape and fold.** Cut 1" wide tabs at each corner (1/2" from each side of corner) (1C). Fold tape to the exterior and press firmly to adhere it to the water resistive barrier.

**Note:** This step is not required if the exterior trim has not been removed.



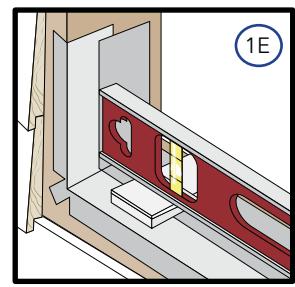
**D. Apply sill flashing tape #2.** Cut a piece of flashing tape 12" longer than the existing opening width. Apply at the bottom, overlapping tape #1 by at least 1". Do not allow the tape to extend past the interior face of the framing (1D).



**E. Install and level shims.** Place 1" wide by 1/4" thick shims on the bottom of the opening, 1/2" from each side, beneath transition bars and mullion joints. Keep shims back 1/2" from interior face of window. Adjust shims as necessary to ensure the sill is level. Once level, attach shims to prevent movement.

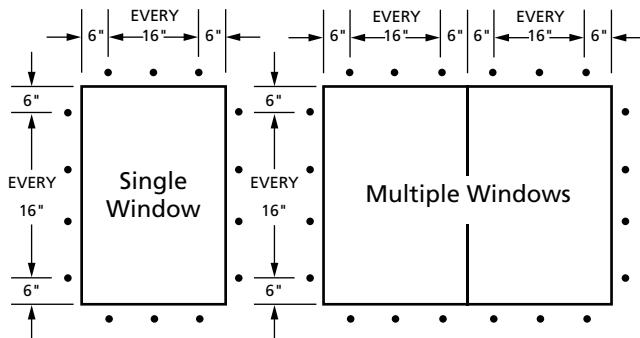
**Note:** Improper placement of shims may result in bowing the bottom of the window.

**F. Test fit the window.**



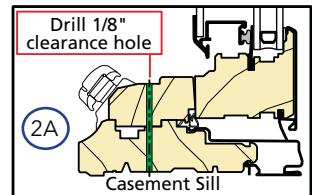
# 2

## Window Preparation:



**A. Casement:** On the room side of the window, drill 1/8" diameter clearance holes through the head, jambs and sill of the frame. Space the holes a maximum of 6" from each end and a maximum of 16" on center.

**Note:** On vent casements, place the holes so they do not interfere with the roto operator and the latch points on the lock side of the window.

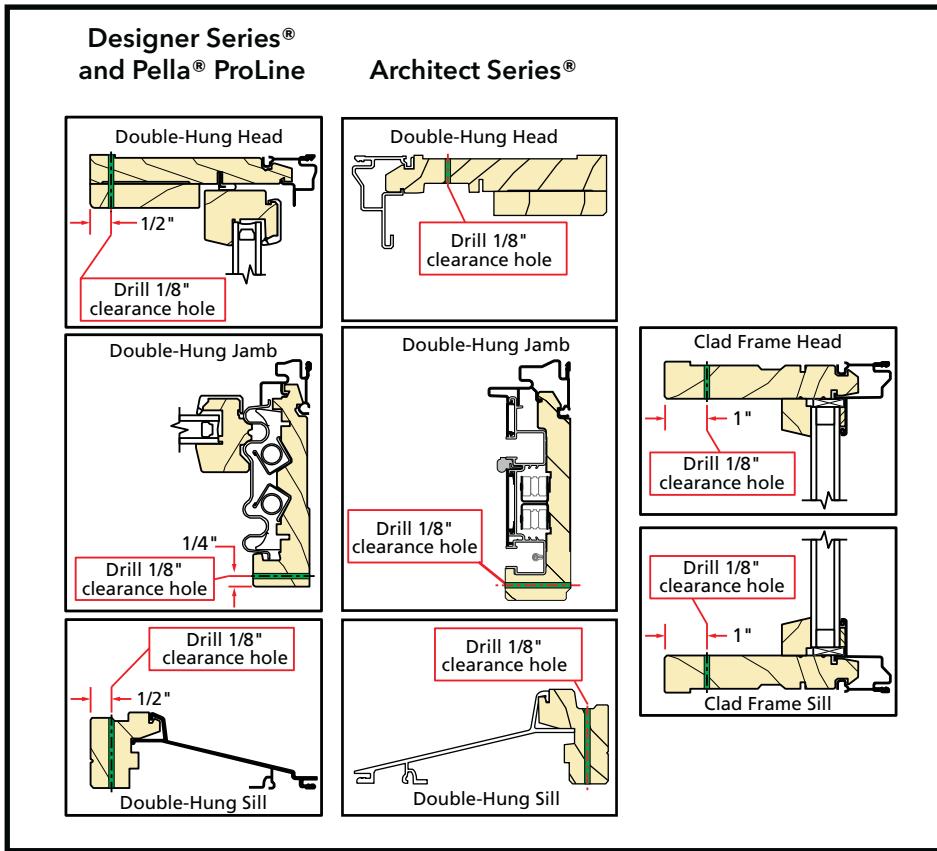


## 2

### Window Preparation (continued):

**B. Double-Hung and Clad Frame:** On the room side of the window, drill 1/8" diameter clearance holes through the frame at the locations shown. Space the holes a maximum of 6" from each end and a maximum of 16" on center.

**Note:** The lower sash must be raised to drill the holes in the sill of the double-hung window.



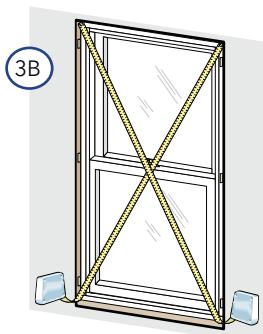
## 3

### Setting and Fastening the Window:

**A. Slide the window into the opening,** placing the bottom of the window on the spacers at the bottom of the opening. Position the window so that the exterior face of the frame extends a minimum of 3/4" onto the exterior wall material to allow for the application of backer rod and sealant (See illustrations in Step 4 for sealant details). Center the window between the sides of the opening to allow clearance for shimming, and insert one #8 x 3-1/8" finish head screw into each of the top clearance holes. This will hold the window in place while shimming it plumb and square.

**B. Place shims 1" from the bottom and top of the window** between the window and the sides of the opening and at the midpoint of the window side. Keep shims back 1/2" from interior face of window. Adjust the shims as required to plumb and square the window in the opening. Also shim behind all the pre-drilled clearance holes.

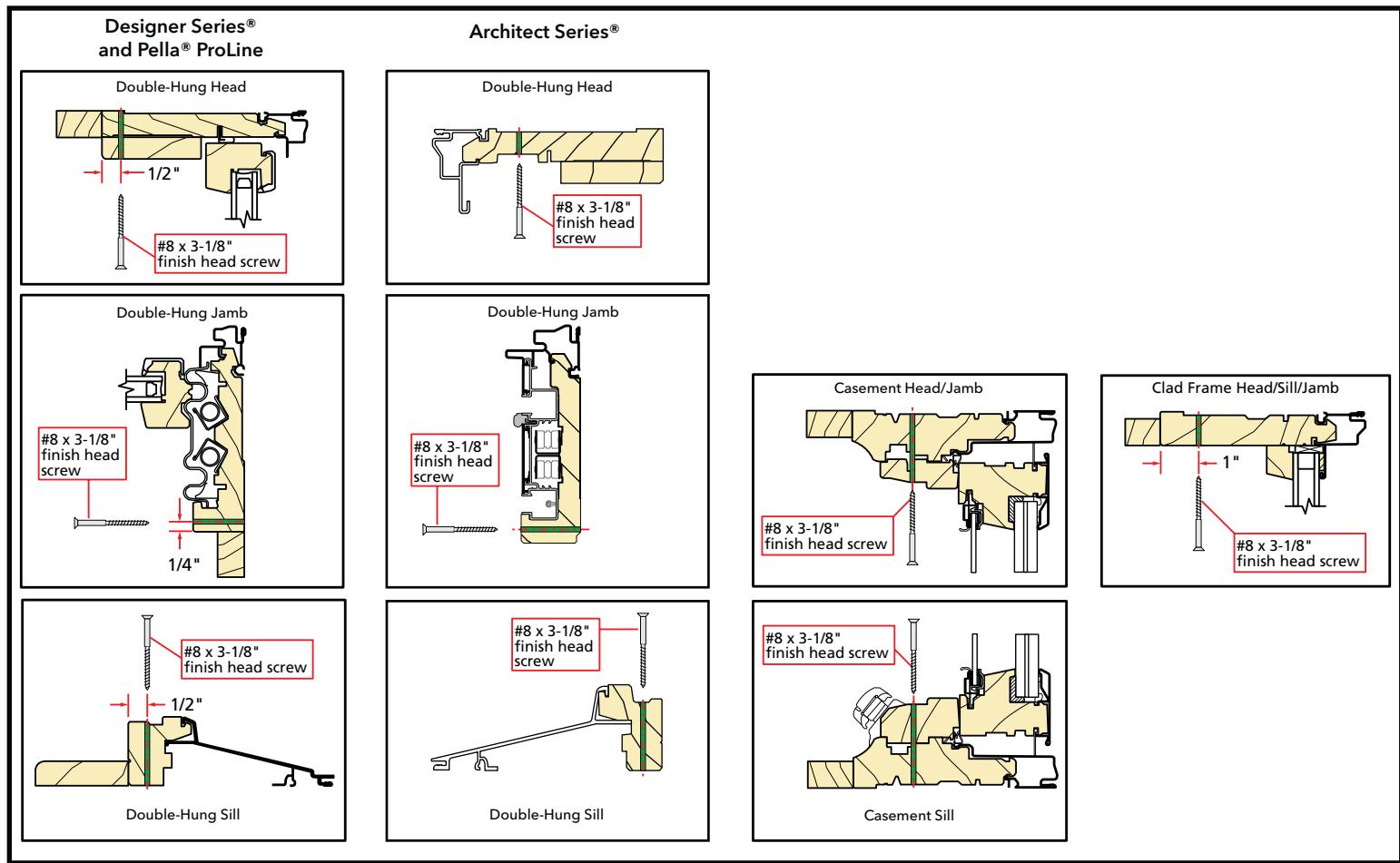
**Note:** Do not shim above the window or in the space between the spacers at the bottom of the window. DO NOT over shim.



# 3

## Setting and Fastening the Window (continued):

C. **Fasten the window to the opening.** Finish nailing the interior trim to wall then drive #8 x 3-1/8" finish head screws into each of the pre-drilled clearance holes.



D. **Check window operation (vent units only).**

**Architect Series® and Designer Series® Double-Hung:** Cut the checkrail bands and remove the shipping spacers. Open and close the window a few times to check for proper operation. Make sure the window will tilt correctly. Close and lock the window.

**ProLine® Double-Hung:** To remove side spacers, slide them up to approximately 4" above the bottom sash. Lift the clip by the interior leg and rotate upward to remove. Raise the bottom sash approximately 2", and tilt the sash in by depressing the jamb liner and pulling inward on the top corners of the sash. Remove the sash clips and return the sash to its original position.

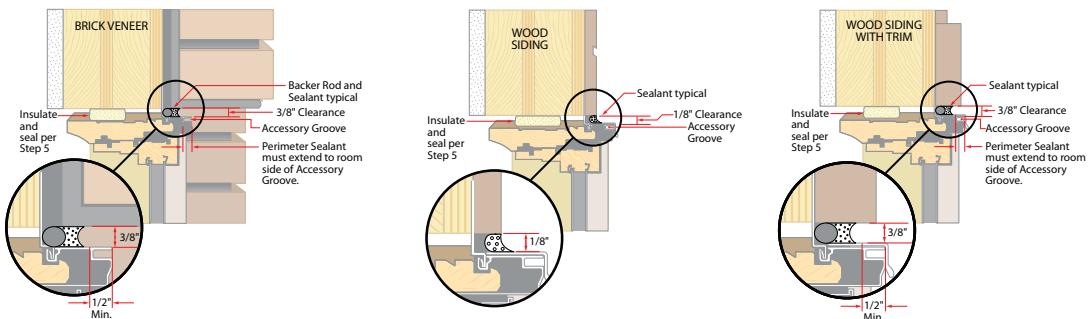
**Casement:** Unlock the window by lifting up on the lock handle. Turn the crank to open the window. Remove the shipping spacers from between the sash and window frame. Close and lock the window.

**Note:** If there are any problems with the operation of the window, recheck shim locations and adjust for plumb and square.

## 4 Sealing the Window to the Exterior Wall Cladding:

When applying siding, brick veneer or other exterior finish material, leave adequate space between the window frame and the material for sealant. Refer to the illustration corresponding to your finish material.

**Note: The sealant details shown are standard recommendations from the sealant industry. Contact your sealant supplier for recommendations and instructions for these and any other applications.**



### A. Insert backer rod into the space around the window as deep as it will go.

This should provide at least a 1/2" clearance between the backer rod and the exterior face of the window.

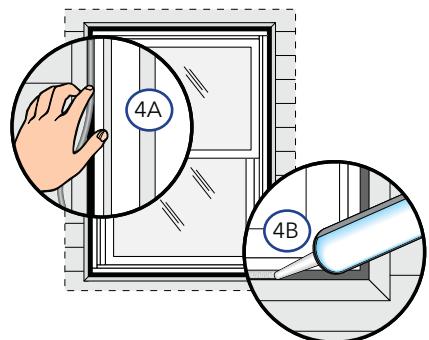
**Note: Backer rod adds shape and depth for the sealant line.**

### B. Apply a bead of high quality exterior grade sealant to the entire perimeter of the window.

### C. Shape, tool and clean excess sealant.

When finished, the sealant should be the shape of an hourglass.

**Note: This method creates a more flexible sealant line capable of expanding and contracting.**



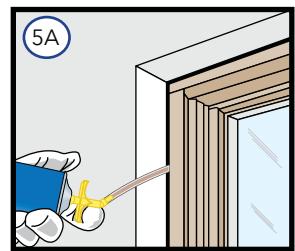
## 5 Interior Seal:

**Caution: Ensure use of low pressure polyurethane window and door installation foams and strictly follow the foam manufacturer's recommendations for application. Use of high pressure foams or improper application of the foam may cause the window to bow and hinder operation.**

### A. Apply insulating foam sealant.

From the interior, insert the nozzle of the applicator approximately 1" deep into the space between the window and the rough opening and apply a 1" deep bead of foam. This will allow room for expansion of the foam and will minimize squeeze out. Apply sealant across interior surface of shims to create a continuous seal. For windows with jamb extensions installed, ensure the foam is placed between the window frame and the rough opening, not between the jamb extension and the rough opening. Follow foam manufacturer's instructions.

**Note: It may be necessary to squeeze the end of the tube with pliers to be able to insert into the space between the window frame and the rough opening. DO NOT completely fill the space from the back of the backer rod to the interior face of the opening.**



### B. Check window operation (vent units only) by opening and closing the window.

**Note: If the window does not operate correctly, check to make sure it is still plumb, level, square and that the sides are not bowed. If adjustments are required, remove the foam with a serrated knife. Adjust the shims, and reapply the insulating foam sealant.**

## **6 Interior Finishing:**

Visible wood surfaces of Pella® products must be finished. Failure to do so voids the Limited Warranty. If products cannot be finished immediately, cover with clear plastic film to protect from dirt, damage and moisture. Remove any construction residue before finishing. Sand all wood surfaces lightly with 180 grit or finer sandpaper. DO NOT use steel wool. BE CAREFUL NOT TO SCRATCH THE GLASS. Remove sanding dust.

For additional information on finishing see the Pella Owner's Manual or go to [www.pella.com](http://www.pella.com).

***Note: To maintain proper product performance do not paint, finish or remove the weather-stripping, mohair dust pads, gaskets or vinyl parts. Air and water leakage will result if these parts are removed. If paint, stain or finish gets on the mohair weather-stripping, immediately blot it thoroughly with a rag and allow it to dry. Flake off any remaining residue. After finishing, allow windows to dry completely before closing them.***

***Pella Corporation is not responsible for finishing imperfections. Use of inappropriate finishes, solvents, brickwash or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.***

## **EXTERIOR FINISH**

The exterior frame and sash are protected by aluminum cladding with our tough EnduraClad® or EnduraClad Plus baked-on factory finish that needs no painting. Clean this surface with mild soap and water. Stubborn stains and deposits may be removed with mineral spirits. DO NOT use abrasives. DO NOT scrape or use tools that might damage the surface.

Use of inappropriate finishes, solvents, brickwash or cleaning chemicals will cause adverse reactions with window and door materials and voids the Limited Warranty.

## **CARE AND MAINTENANCE**

Care and maintenance information is available in the Pella Owner's Manual. You can obtain an owner's manual by contacting your local Pella retailer. This information is also available on [www.pella.com](http://www.pella.com).

## **IMPORTANT NOTICE**

Because all construction must anticipate some water infiltration, it is important that the wall system be designed and constructed to properly manage moisture. Pella Corporation is not responsible for claims or damages caused by anticipated and unanticipated water infiltration; deficiencies in building design, construction and maintenance; failure to install Pella® products in accordance with Pella installation instructions; or the use of Pella products in wall systems which do not allow for proper management of moisture within the wall systems. The determination of the suitability of all building components, including the use of Pella products, as well as the design and installation of flashing and sealing systems are the responsibility of the Buyer or User, the architect, contractor, installer, or other construction professional and are not the responsibility of Pella.

Pella products should not be used in barrier wall systems which do not allow for proper management of moisture within the wall systems, such as barrier Exterior Insulation and Finish Systems, (EIFS) (also known as synthetic stucco) or other non-water managed systems. Except in the states of California, New Mexico, Arizona, Nevada, Utah, and Colorado, **Pella makes no warranty of any kind and assumes no responsibility for Pella windows and doors installed in barrier wall systems. In the states listed above, the installation of Pella products in barrier wall or similar systems must be in accordance with Pella installation instructions.**

Product modifications that are not approved by Pella Corporation will void the Limited Warranty.

## INSTALLING ROTO COVER AND CRANK

**Note:** Finish the interior of the window and allow the window to dry before proceeding with these instructions. (To open the window for finishing, partially insert the lock handle into the jamb, unlock the unit, temporarily attach the crank handle and turn to open.)

A. Place the cover over the operator stud and snap into place. Position the pocket end of the cover into place.

**Note:** If the cover does not have the screw hole, apply pressure on the pocket end of the cover to snap the cover into place and proceed to step C.

B. Insert the provided screw into the hole in the bottom of the pocket. Use a # 1 Phillips screwdriver to secure the pocket screw snug against the bottom of the pocket to avoid scratching the crank handle knob. DO NOT over tighten.

C. Use a medium size flat-blade screwdriver to loosen the set screw in the crank handle.

D. Slide the crank handle onto the stud. Unlock, open window, then close and lock window.

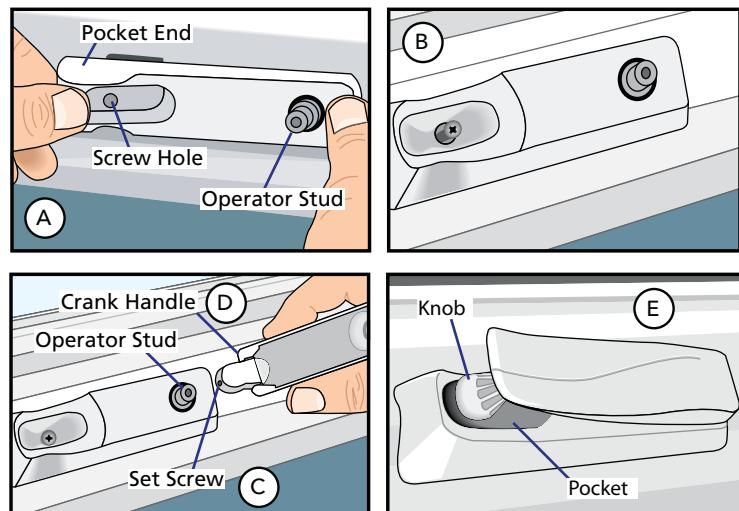
E. Fold the crank handle down and check alignment of knob with the pocket.

**Note:** You may need to adjust the crank position on the stud until the correct alignment is achieved.

F. Open the crank and tighten the set screw.

G. After the final installation, fold the crank over and snap the knob into the pocket.

**Note:** Even with the window open the crank can be folded to avoid interfering with the window treatments.



## CASEMENT WINDOW LOCK LEVER REMOVAL AND INSERTION

**Note:** You may want to remove the lock lever prior to finishing the window, or if it needs to be replaced with a lock lever in a different finish.

A. Unlock and open the window.

B. Place the lock lever in the locked position.

C. From the exterior of the window, insert a small flat-blade screwdriver between the cam and lock lever near the bottom of the opening between the stop and frame gasket.

D. Push the screwdriver inwards with a small amount of pressure; then turn the blade slightly clockwise for a left hand unit, counter-clockwise for a right hand unit. **DO NOT** over-twist the screwdriver, this can damage the lock driver.

**Note:** This will release the hook in the lever from the cam hook.

E. Remove the lock lever by pulling it toward the interior of the building.

F. To install a lock lever, hold it in the lock position and insert it, from the interior, into the slot until it snaps into the cam.

